
Evaluation of the Grant Program for Rural Health Care Transition Ninth Semi-Annual Progress Report



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EXECUTIVE SUMMARY

Congress charged the Health Care Financing Administration (HCFA) with implementing a program of Rural Health Care Transition (RHCT) grants (Omnibus Budget Reconciliation Act of 1987: P.L. 100-203) and then expanding the program (Omnibus Budget Reconciliation Act of 1989: P.L. 101-239). The goal of this program is to help small (fewer than 100 beds) rural hospitals improve their financial stability and management capacity.

The program was implemented in September 1989 and expanded in September 1990, September 1991, September 1992, and September 1993. Since the program began, 925 RHCT grants have been awarded: 184 in 1989, 212 in 1990, 187 in 1991, 163 in 1992, and 179 in 1993. More than one-third of the small rural hospitals in the United States have received program grants, and Congress has authorized \$96 million over the past 5 years for the program.

The 1989 and 1990 grantees completed their grant projects in September 1992 and September 1993, respectively. Currently, 496 active grantees have 3-year grants and are progressing with their projects.

The legislation mandated that the HCFA Administrator report to Congress every 6 months on the program's progress. This document is the ninth semi-annual progress report. In it, we describe the progress of the 1991 grantees after 21 months and the 1992 grantees after 9 months. This report is based on monitoring reports submitted by the grantees. We also focus on two special topics: the role of the rural hospital consortia among the grantees, and the effect of aging facilities on the hospitals' operations and their grant projects. These special topics are included because data are now available from a consortia supplement questionnaire for the 1991 grantees and from supplemental interviews conducted for 40 selected 1991 and 1992 grantees.

SPECIAL FOCUS: THE ROLE OF CONSORTIA IN THE RHCT GRANTS PROGRAM

Many policy experts agree that in areas with scarce health resources, health care providers should work cooperatively, not competitively. The RHCT grants program promotes cooperation by encouraging applications from rural hospitals intending to form a consortium or pursue a consortium project.

Hospital consortia are relationships that provide a framework for hospitals to undertake joint activities and take advantage of economies of scale, but allow hospitals to maintain local autonomy. Developing effective rural hospital consortia can be difficult. The small, financially

distressed hospitals have the most to gain from a consortium relationship. These hospitals have few resources to buy management expertise, and insufficient patient bases to support many services. By working together in a consortium, these hospitals could use each other as management resources and provide joint services. But these weak hospitals are the least likely to have the time, resources, or managerial expertise to form rural hospital consortia.

The grant program is helping small, financially weak hospitals overcome these resource constraints; they are joining RHCT-funded consortia disproportionately. The RHCT-funded consortium hospitals staff 30 beds and have 6 physicians, on average, while the independent hospitals staff 39 beds and have 10 physicians. The RHCT-funded consortium members also have lower operating margins, generate less revenue from their working capital, and have older facilities. In addition, the RHCT-funded consortia are less likely to have a physician on their hospital boards than are non-RHCT-funded consortia—a management characteristic that has in the past correlated with good consortium project adoption. Thus, the RHCT grants program is promoting consortium formation among the small, financially weak hospitals that may not have the management structure needed to ensure project success.

Despite the difficulties facing the consortium grantees, they report their communication is effective, and thus far they are making progress. The vast majority (98 percent) of the grantees in consortium projects funded in 1990 and 1991 felt that their consortium communication is effective all or most of the time. Of the 21 consortia reporting progress, 9 have implemented consortia projects, and 7 have formed their consortia (although they have not implemented any collaborative projects). However, six of the consortia have stopped pursuing the hospitals' collaborative projects and are pursuing projects individually.

SPECIAL FOCUS: THE EFFECTS OF AGING FACILITIES

To explore the effects of aging facilities on hospital operations and project progress, we interviewed the 40 grantees with the oldest facilities—those that most recently renovated between 1951 and 1973. These grantees are generally small public hospitals located primarily in the Midwest that face some startling physical constraints. A few are wooden structures that do not meet fire safety codes, some lack handicapped-accessible entrances, and several have placed their administrative offices in former closets because of lack of space.

The 40 grantees cited two major reasons why they have not renovated their facilities. These are: (1) the hospital could not afford to renovate, or could not access capital financing to undertake a renovation; and (2) the hospital administration felt renovation was unnecessary. Two-thirds of grantees felt their facilities needed some type of renovation, and 38 percent had plans to renovate or were in the process of renovation. The renovations included adding space for additional outpatient services and long-term care services and consolidation of services to improve hospital staffing patterns and patient flow.

Most of the grantees felt their aged facilities negatively affected their hospital operations. The most frequent problem is that the buildings were designed to meet inpatient care needs, and as a result, are inefficient for providing outpatient services. Several grantees also felt their aged facilities hurt physician recruitment efforts and damaged community support.

These aged facilities do not appear to affect either the hospitals' choice of a project or the project's progress. Only five of the interviewed grantees were using their grant funds for construction projects—a proportion comparable to the rest of the grantees. In addition, compared with all grantees, a slightly higher proportion of the grantees with aged facilities were on schedule with their grant projects.

GRANTEE STATUS

Among the 350 hospitals awarded grants in 1991 and 1992, 316 are still active and 34 no longer have grants. Five of the 34 inactive grantees discontinued their grants because they closed.

During the past 6 months, 17 grantees left the program. Two hospitals closed, eight left the grant program after being reclassified as urban, and seven voluntarily relinquished their grants. The status of 1989 through 1993 grantees as of September 30, 1993 is as follows:

Grantee Status	1989	1990	1991	1992	1993
Months Since Award	--	--	24	12	0
Continuing	--	--	162	154	179
Completed	174	181	0	0	0
Discontinued Grant	6	26	22	7	0
Hospital Closed	4	5	3	2	0
Total Awards	184	212	187	163	179
Total Fiscal Year Funding (Millions)	\$8.3	\$17.8	\$24.4	\$23.0	\$22.8

1991 GRANTEES: PROGRESS AFTER 21 MONTHS

After 21 months, the majority of 1991 grantees are on schedule, and more reported being on schedule than 6 months earlier. The most frequent grant-supported activities are recruiting (63 percent of grantees), staff training and development (60 percent), and equipment purchases (58 percent). Grantees have finished some activities, especially establishing inpatient services and adding swing beds. Despite their progress, the grantees reported being behind schedule in some activities, including recruiting health professionals. The inability to recruit health professionals has been a constant problem for the grantees since the program began.

1992 GRANTEES: PROGRESS AFTER 9 MONTHS

Nine months into their projects, the 1992 grantees have made considerable progress. The majority (59 percent) were on or ahead of schedule. Similar to the 1991 grantees, the most frequently pursued project activities are purchasing equipment (72 percent), recruiting (68 percent), and staff training and development (59 percent). The activity grantees most frequently reported as behind schedule is establishing inpatient services. This activity requires the cooperation of nonhospital personnel, which leads to delays in the early stages of a project.

I. INTRODUCTION

A. LEGISLATIVE HISTORY AND PURPOSE OF THE GRANT PROGRAM

Congressional concerns about the financial and operational viability of rural hospitals and the access of rural residents to health care led to the enactment of the Grant Program for Rural Health Care Transition. In the legislation, Congress mandated that the Health Care Financing Administration (HCFA):

Establish a program of grants to assist eligible small rural hospitals and their communities in the planning and implementation of projects to modify the type and extent of services such hospitals provide in order to adjust for one or more of the following factors:

- (1) Changes in clinical practice patterns
- (2) Changes in service populations
- (3) Declining demand for acute-care inpatient hospital capacity
- (4) Declining ability to provide appropriate staffing for inpatient hospitals
- (5) Increasing demand for ambulatory and emergency services
- (6) Increasing demand for appropriate integration of community health services
- (7) The need for adequate access to emergency care and inpatient care in areas in which a number of underutilized hospital beds are being eliminated . . .

Each demonstration project . . . shall demonstrate methods of strengthening the financial and managerial capability of the hospitals involved to provide necessary services.¹

¹Omnibus Budget Reconciliation Act of 1987 (P.L. 100-203, Section 4005[e]).

Furthermore, the legislation required the HCFA Administrator to report on the progress of the program every 6 months.² This is the ninth report in this series of reports mandated by Congress.

The legislation further stipulated that "a grant may not exceed \$50,000 a year and may not exceed a term of two years."³ Funds could be spent for any expense incurred in planning and implementing a project, with two exceptions: no part of the grant funds could be used to retire debt incurred before the grant award, and no more than one-third of the grant funds could be used to cover capital-related costs. To be eligible for a grant, a hospital had to be a non-Federal, nonproprietary, short-term, general acute-care hospital with fewer than 100 beds and had to be classified as a rural hospital under Medicare's Prospective Payment System.⁴

In the Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239, section 6003 [g]), Congress enacted two modifications to the Rural Health Care Transition (RHCT) grant program. First, the grant period for hospitals receiving an award after fiscal year 1989 was extended from 2 to 3 years. Second, hospitals that use their grants to convert to rural primary-care hospitals (as described in section 1820 of the Social Security Act) or to develop a rural health network (as defined in section 1820[g] of the Social Security Act) are not limited to the one-third capital expenditure maximum.

²This progress report was prepared by Mathematica Policy Research, Inc., under contracts 500-87-0028-12 and 500-91-0075 to the Health Care Financing Administration.

³Section 4005(e)(6) of the act.

⁴Section 4005(e)(2) of the act.

The amount of funds appropriated by Congress for the program has varied over the years:

<u>Fiscal Year</u>	<u>Amount</u>
1989	\$ 8.3 million
1990	\$17.8 million
1991	\$24.4 million
1992	\$23.0 million
1993	\$22.8 million

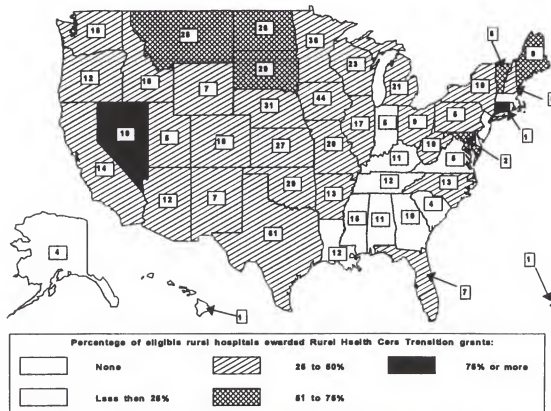
The funds increased from 1989 through 1991 consistent with increases in the number of active grantees each year.

B. THE NUMBER AND DISTRIBUTION OF GRANTEES

HCFA uses two criteria to select the RHCT grant recipients: (1) the equitable distribution of funds across states; and (2) reviewers' assessment of project merits. After these criteria are applied, the bulk of the funds are first distributed across states in proportion to the number of eligible hospitals. Awards are then made within each state on the basis of merit. The remaining funds are awarded on the basis of merit without regard to state. Under these criteria, 684 hospitals (35 percent of eligible rural hospitals) have participated in the RHCT grant program between 1989 and 1992. In 1993, 179 hospitals were awarded RHCT grants. The state-by-state distribution of the number and percentage of hospitals receiving RHCT grant awards between 1989 and 1992 is shown in Figure I.1.⁵

⁵The hospitals awarded RHCT grants in 1993 are not included in Figure I.1. In 1992, there were 1,960 eligible rural hospitals nationwide. In 1991, Connecticut's only eligible hospital received an RHCT grant award. In 1992, this hospital was reclassified as urban; consequently, Connecticut had no eligible hospitals at that time. We included this hospital in the list of eligible hospitals in Figure I.1, however, to calculate Connecticut's percentage of eligible hospitals awarded a grant between 1989 and 1992.

FIGURE I.1
NUMBER AND PERCENTAGE OF ELIGIBLE HOSPITALS
AWARDED RURAL HEALTH CARE TRANSITION
GRANTS BETWEEN 1989 AND 1992, BY STATE



NOTE: The number of hospitals with Rural Health Care Transition grants is shown on the map.
 A total of 684 hospitals received Rural Health Care Transition grants between 1989 and 1992.
 Delaware, Rhode Island, and New Jersey do not have eligible hospitals.

Because the bulk of the funds are distributed equitably across states, the *number* of grantees in a state corresponds roughly to that state's portion of the eligible hospitals nationwide. As Figure I.1 shows, Texas has the largest number of hospitals awarded RHCT grants (61), followed by Iowa and Minnesota with 44 and 38 grant recipients, respectively. (Texas ranks first, Minnesota ranks third, and Iowa ranks fourth in number of eligible hospitals.)

On the other hand, the *percentage* of eligible hospitals awarded a grant within a particular state may reflect a more organized effort to pursue grants. States with a higher percentage of grants are those winning more of the remaining merit funds. The percentage of winners is affected by the number and quality of grant applications. An analysis of the percentage of eligible hospitals with grants in each state shows that states with more than 50 percent of the eligible hospitals participating in the grant program are generally clustered in three areas of the country: New England, the Northern plains, and Nevada. By contrast, states with the lowest program participation rates are located in the South.

These differences suggest that the aggressiveness with which hospitals pursue RHCT grants may vary by state and region. The impetus for the greater level of effort in some states is unclear. It may reflect efforts of a State hospital association, a regional management, or a multihospital system. It may also reflect the willingness of hospitals in certain areas to form consortia when applying for an RHCT grant, thereby attracting hospitals that may not have otherwise applied.

II. CONSORTIUM GRANTEES

Recognizing that cooperation among health care providers can improve the delivery of health care in rural areas, the Federal government has established a number of programs, such as the Essential Access Community Hospital program and the Rural Outreach grant program, to entice rural providers to work with one another. The Rural Health Care Transition (RHCT) grants program has also encouraged cooperation by basing awards on the demonstration of local cooperation and encouraging applications from rural hospitals that intend to form consortia or pursue consortium projects.

A. THE ROLE OF CONSORTIA AMONG RURAL HOSPITALS

Rural hospitals have joined together under different types of contractual arrangements to work together and take advantage of economies of scale. The most inclusive of these contractual arrangements is the multihospital system, which provides many opportunities for joint activities. But a multihospital system requires that hospitals relinquish their local autonomy—a sacrifice that many community-based rural hospitals are unwilling to make. Hospital consortia are less structured relationships that provide the framework for hospitals to undertake joint activities but allow the hospitals to maintain local autonomy. As of January 1, 1989, 127 rural hospital consortia were operating in 43 states (Christianson et al. 1990).

Despite these developments, a paradox is developing among rural hospitals. Small, financially distressed hospitals have the most to gain from a consortium relationship. These

hospitals lack the resources to hire consultants, attend conferences, or purchase advanced management technology that can help their administration address financing, quality assurance, and staffing issues. Their small patient base makes it financially difficult to support a full range of services. The potential benefits from working with other administrators and introducing joint services are therefore much greater for these hospitals. Yet these weak institutions are the least likely to have the time, resources, or managerial expertise to form a rural hospital consortium. Even if these hospitals join a consortium, weak management may thwart the hospitals' efforts to take advantage of its activities. For example, if the administrator cannot convince the medical staff to participate in joint quality assurance activities, or the hospital board to fund joint programs with traditional rivals, then the consortium will have difficulty achieving consortium goals. Thus consortia may not be able to help those hospitals that need them the most.

B. ARE WEAK HOSPITALS JOINING HOSPITAL CONSORTIA?

For consortia to help weak hospitals, weak hospitals must join consortia. To examine whether the hospitals joining consortia are weaker than those that do not join, we compared the hospital characteristics of completely independent grantees with the characteristics of linked hospitals. Hospitals can be linked, either to other hospitals or to a central administrative office, through an RHCT grant program-funded consortium, a non-RHCT-funded consortium, a multihospital system, or a contract management relationship.

Our study shows that relatively weak hospitals are joining RHCT-funded consortia. The average RHCT consortium member is smaller, has fewer physicians, and is financially weaker

than the average independent hospital. These RHCT consortium hospitals staff 30 beds and have 6 physicians on staff on average, while the independent hospitals staff 39 beds and have 10 physicians on staff. (See Table II.1.) These RHCT consortium hospitals also have lower operating margins, generate less revenue from their working capital, and have older facilities than the independent hospitals.

Members of non-RHCT-funded consortia are also smaller and financially weaker than the independent hospitals. The differences in size and financial measures, however, are smaller than the differences for the RHCT-funded consortia. The non-RHCT-funded consortium members, on average, staff 35 beds (compared with 39 for the independents and 30 for the RHCT-funded consortia) and have 8 physicians on staff (compared with 10 for the independents and 6 for the RHCT-funded consortia), on average. They also have lower operating margins and generate less revenue from their working capital than the independent hospitals.

RHCT-funded consortium members are much less likely to include physicians on their hospital boards than the non-RHCT-funded consortium members. Previous research has shown that rural physician involvement in hospital governance positively influences the adoption of consortium projects (Kralewski et al. 1993). Kralewski's research, however, was based on few observations and may not be applicable to other rural consortia. However, other research has shown that physician involvement on hospital boards is associated with better hospital performance (Morrisey, Alexander, and Ohsfeldt 1990). One explanation for this association is that since physicians can, to some extent, control the hospital's flow of work,

TABLE II.1

FINANCIAL AND MANAGEMENT CHARACTERISTICS OF THE 1990 AND 1991 GRANTEE HOSPITALS, BY MANAGEMENT STRATEGY

Hospital Characteristics at Beginning of Program	Hospitals in ^c			
	Independent Hospital (N = 133)	RHCT-Funded Consortia (N = 102)	Non-RHCT-Funded Consortia (N = 83)	Multihospital System or Contract Management (N = 147)
Descriptive Characteristics				
Average Number of Staffed Beds	39.1	29.5	34.5	38.3
Average Percent Occupancy Rate	34.0	34.5	36.0	34.5
Average Number of Physicians	10.1	5.8	8.1	9.9
Percentage with Physician on Hospital Board	44.4	40.2	54.2	52.7
Financial Characteristics				
Operating Margin (Median) ^a	-.037	-.051	-.057	-.039
Ratio of Net Patient Service Revenue to Working Capital (Median)	5.46	4.53	4.75	4.83
Age of Plant (Median) ^b	10.15	10.47	10.33	9.38
Ratio of Long-Term Liabilities to Total Assets (Median)	.073	.057	.090	.158

SOURCE: Baseline form and Consortia Supplement form.

^aDefined as $\frac{\text{Net Service Revenue} - \text{Total Operating Expenses}}{\text{Net Patient Service Revenue}}$

^bDefined as total accumulated depreciation divided by total current depreciation.

^cA hospital classified as independent is in that category exclusively. Other hospitals may be in more than one category.

physician cooperation is necessary for smooth hospital operations. Hence, including physicians in the hospital's planning processes (that is, including them on the board) may result in smoother program implementation and better hospital performance. If this research is applicable, then the lack of physicians on the hospital boards suggests that the RHCT-funded consortium hospitals are less likely to adopt (and hence implement) consortium goals than the non-RHCT hospitals.

The characteristics of hospitals that have strong formal linkages with other hospitals or a central office, either through multihospital systems or management contracts, are similar to those of independent hospitals. Both types of hospitals have approximately the same number of staffed beds, physicians, and operating margins. One striking difference, however, is that strongly linked hospitals have a younger age of facility and a higher ratio of long-term liabilities to total assets. This difference is consistent with the perception that strong linkages improve access to capital financing and allow their members to update their facilities more often (OTA, pg. 173).

These data suggest that the RHCT program is achieving a key goal by promoting consortium formation among the weakest hospitals. The relatively small number of hospitals with a physician on the hospital board, however, suggests that these institutions may not have the management structure needed to ensure project success. The RHCT-funded consortia have the potential to benefit from their projects, but they need to overcome both financial and institutional problems to achieve program success.

C. HOW WELL DO THE MEMBERS OF RHCT CONSORTIA COMMUNICATE?

One key factor determining whether the RHCT consortium projects are successful and able to meet their goals is how well the consortium members communicate. If communication is effective, the consortium will be better able to identify problems, develop projects to address those problems, and implement those projects. If communication is ineffective, it is unlikely that the consortium will implement projects that actually helps its members.

The RHCT-funded consortium members generally agree their communication is effective, although the 1991 consortium members perceive that they have more difficulty communicating than their 1990 counterparts. Seventy-one percent of the consortia funded in 1991 and 66 percent of the consortia funded in 1990 meet at least once per month, which is a reasonable frequency for hospitals trying to pursue collaborative projects. (See Table II.2.) But only 39 percent of the 1991 consortium hospitals indicated that communication was always effective, in contrast to 63 percent of the 1990 consortium hospitals. This suggests that the 1991 consortia grantees perceive that they have more difficulty communicating, which may in turn affect project progress.

D. HOW WELL ARE THE RHCT CONSORTIUM PROJECTS PROGRESSING?¹

The 1991 grantees have made considerable progress on their consortium projects, although some projects have broken down. Of the 13 consortia from 1991 reporting project progress after 2 years, 5 have actually implemented their consortium projects, 4 have formed and

¹This section is based upon the 1991 and 1992 consortium grantees, which are active in the program. The 1990 consortium grantees have completed their projects.

TABLE II.2
COMMUNICATION AMONG HOSPITALS IN RHCT-FUNDED CONSORTIA:
1990 AND 1991 GRANTEES

Communication Measure	1990 ^{a,b}	1991 ^{c,d}	Combined
Percentage of Consortia that Meet:			
More than Once Each Week	13 %	21 %	17 %
Less than Once Each Week but More Often than Once Each Month	33 %	36 %	35 %
Once Each Month	20 %	14 %	17 %
Less than Once per Month but More Often than Annually	33 %	21 %	28 %
Meet Annually	--	7 %	3 %
Percentage of Hospitals Reporting that Consortium Communication Is Effective:			
Always	63 %	39 %	52 %
Most of the Time	37 %	57 %	46 %
Occasionally	--	4 %	2 %

SOURCE: Consortia Supplement.

^aA total of 15 consortia reported.

^bA total of 54 grantees reported.

^cA total of 14 consortia reported.

^dA total of 46 grantees reported.

planned their projects but have yet to implement any programs, and 4 have pursued individual hospital projects and have not pursued consortium projects. Among the hospitals that implemented projects, the consortia were most successful at implementing joint professional education projects, including emergency medical training, nursing education programs, and business office staff training. Consortium hospitals also successfully undertook joint planning for services, and the individual hospitals implemented projects identified during the joint planning sessions. With this approach, each hospital introduced a different service to provide care for the entire geographic area served by the consortium. Thus far, geriatric services, physical therapy services, and physician specialty services have been implemented by consortia using this approach.

The 1992 grantees have also made considerable progress on their consortium projects, although they have been funded for only 9 months. In part, this solid progress resulted because some of the consortia were formed prior to receiving their grants. Nevertheless, of the nine consortia reporting progress, four have actually implemented collaborative projects, three are formed and planning their projects but have yet to implement any programs, and two have pursued individual hospital projects but are not pursuing consortium projects.

One recently formed consortium has incorporated a unique concept--the state (Wisconsin) is a member of the three-hospital consortium. The state has made a commitment to exploring regulatory mandates affecting the hospitals and health care providers as well as developing a regional medical center for the area. Another seven-hospital consortium does not have a formal contract, but has worked closely with the state in its consortium efforts. This

consortium has already implemented joint health care professional recruitment and retention efforts and a profitable joint venture project (buying a Zeiss microscope), and is presently trying to obtain a group insurance contract.

In summary, despite the small size and poor financial performance of the average RHCT member, the consortium grantees are making solid progress towards cooperative efforts. Whether these projects will have a positive financial impact remains to be seen. However, a significant proportion of the consortium projects (6 out of 21) have stopped collaborative efforts and report that the hospitals are pursuing independent projects with their grants. While these independent projects may be beneficial to the grantees, the lack of cooperative projects indicates that the grantees are having difficulty making their consortium efforts work.

III. SELF-REPORTED PROGRESS OF 1991 GRANTEES

The fourth progress report from 1991 grantees (covering January 1, 1993 through June 30, 1993) was due on August 4, 1993. One hundred and sixty-five grantees returned their monitoring reports in time to be processed for this report. This chapter is based on the progress these grantees reported.

A. STATUS OF 1991 GRANTEES

Over the past 6 months, nine grantees left the program--six were reclassified as urban for Medicare payment, two voluntarily left the program, and one ceased operations. Of the original 187 grantee hospitals, 163 (87 percent) are still active. (See Table III.1.)

B. PROGRESS OF 1991 GRANTEES

The 1991 grantees continued to make steady progress at the end of 21 months. Three percent of the grantees completed all their activities, 62 percent were ahead or on schedule, and 35 percent were a month or more behind schedule. (See Table III.2.) Compared to 6 months earlier, fewer 1991 grantees were behind schedule, suggesting they overcame earlier delays.

The grantees' most frequent activities during the past 6 months were staff recruitment and training (102 and 97 grantees, respectively). Other frequent activities included equipment purchases (94 grantees), planning or market analysis (92 grantees), and education, prevention, or wellness programs (78 grantees).

TABLE III.1
1991 GRANTEE STATUS

	At Award 9/15/91	Month 3 1/1/92	Month 9 7/1/92	Month 15 1/1/93	Month 21 7/1/93	Cumulative 7/1/93
Grantees Receiving an Award	187	--	--	--	--	187
Number of Discontinuations in Period	1 ^a	1 ^c	12 ^f	0	8 ^b	22
Number of Hospitals Ceasing Operations and Discontinuing in Period	2 ^b	0	0	0	1 ⁱ	3
Number Remaining at End of Period	184	183	171	171	162	162
Other Changes:						
Ceased hospital operations but still a grantee	0	1 ^a	0	0	0	1
Changed scope	0	1 ^e	3 ^g	0	1 ^j	5

^aBonner General Hospital, Idaho

^bJohn MacDonald Hospital, Iowa
Moshannon Valley Community Hospital, Pennsylvania

^cRobersonville Medical Center, North Carolina
(Facility Closed)

^dSt. John Hospital, Kansas

^eHardin County General Hospital, Illinois

^fGordon Hospital, Georgia
Fostoria Community Hospital, Ohio
(Also a 1992 Grantee)
Lee Memorial Hospital, Texas
Walton Regional Hospital, Florida
Kentucky River Medical Center
Putnam County Hospital, Indiana
Claiborne County Hospital, Mississippi
Fallon Medical Complex, Montana
Hamilton County General Hospital, Texas
Mercy Hospital, North Dakota
(Member of Consortium 33)
Towner County Memorial Hospital, North Dakota
(Member of Consortium 33)
Day Kimball Hospital, Connecticut

^gLawrence County Hospital, Mississippi
Down East Community Hospital, Maine
Blue Ridge Hospital System, North Carolina

^hOneida County Hospital, Idaho
Hillcrest Hospital, Mississippi
Abrom Kaplan Memorial Hospital, Louisiana
Cooper County Memorial Hospital, Missouri
Garrison Memorial Hospital, South Dakota
Pioneer Memorial Hospital, South Dakota
Yoakum Community Hospital, Texas
Iverson Memorial Hospital, Wyoming

ⁱRenville-Bottineau Memorial Hospital, North Dakota

^jCrockett County Hospital, Texas

TABLE III.2
PROJECT PROGRESS AFTER 21 MONTHS, BY OBJECTIVE:
1991 GRANTEES

Project Objective	Total Number	Percentage Completed	Percentage Ahead of Schedule	Percentage on Schedule	Percentage Behind Schedule by More than One Month
Recruiting	102	19	2	51	28
Training or Staff Development	97	11	3	79	6
Equipment Purchase	94	22	1	65	12
Planning or Market Analysis	92	13	--	74	13
Education, Prevention, or Wellness Programs	78	4	--	91	5
Rural Health Network ^a	59	15	3	63	19
Clinic	59	9	2	69	21
Construction or Renovation	47	32	2	55	11
Outpatient Service	43	16	2	63	19
Inpatient or Hospice Service	34	35	--	56	9
Other Health Service	20	10	--	75	15
Emergency Medical Services	16	13	6	75	6
Other	11	9	--	73	18
Swing Beds	11	60	--	40	--
Total	161 ^b	3	1	61	35

SOURCE: Fourth Grantee Monitoring Report, 1991 grantees.

NOTES: Percentages may not total 100 percent because of rounding error. Only grantees that were still active at the end of 21 months are included.

Progress is defined by the project's most delayed activity. For example, a project that is on schedule in only one activity and ahead of schedule in all the rest is defined to be on schedule.

^aThese rural health networks include hospital consortia, as well as formal and informal networks.

^bFour hospitals did not report project timeliness and are not included in the table.

The 1991 grantees were most successful at implementing inpatient services. This is surprising because these activities often require other organizations (for example, state certificate of need regulators and building inspectors) to make decisions and are thus prone to delays. Sixty percent of the 11 grantees establishing swing beds completed this activity, whereas none had completed this activity 6 months earlier. Further, 35 percent of the 34 grantees establishing inpatient or hospice services completed those project activities, whereas only 15 percent had completed those activities 6 months earlier.

Grantees that pursued recruiting projects were most likely to be delayed: 28 percent of the recruiting projects were behind schedule after 21 months. This is probably due to the grantees' optimism regarding how long it will take to recruit. Furthermore, 21 percent of the clinic projects were behind schedule after 21 months. The most common reason cited for these delays was the difficulty in recruiting physicians and midlevel practitioners necessary to operate clinics. One of the grantees, a hospital in the Midwest, cited the summer floods as the reason that physician candidates could not visit the area. And other hospitals cited the unexpected loss of physicians and nurse practitioners as reasons why their clinic projects faced delays.

C. PROJECT MODIFICATIONS AND PROBLEMS ENCOUNTERED

One of the 1991 grantees modified part of its project during the past 6 months. A grantee from Texas has dropped its goal of recruiting a physical therapist and instead plans to use part of its grant to establish a home health program. The hospital decided to drop the physical therapy project after discussion with physicians, board members, and hospital staff.

One grantee, a hospital from Missouri, experienced severe problems getting its project--a geriatric assessment unit--established. The geriatric assessment unit was not approved for exclusion from Medicare prospective payment reimbursement. Consequently, the hospital closed the unit because the service was losing money at a time when the hospital was in severe financial difficulties.

D. GRANT EXPENDITURES

HCFA awarded \$15,871,589 to the 1991 grantees in the first 2 years--\$8,173,669 for the first year, and \$7,697,920 for the second year. Twenty-one months after HCFA made the awards, the reporting hospitals had spent \$12,325,541.¹

Consistent with earlier grantees, the 1991 grantees reported spending more of their grants on personnel and fringe benefits (37 percent) than on any other category. Cumulative expenditures by category included:

- Salary and fringe benefits: \$4,591,924 (37 percent)
- Equipment and capital: \$2,127,451 (17 percent)
- Nonphysician contracts: \$1,993,149 (16 percent)
- Physician contracts: \$1,527,180 (12 percent)
- Supplies: \$531,688 (4 percent)

¹This figure and all following grant expenditure figures in this chapter include information from all 1991 grantees reporting since the beginning of the program.

- Travel: \$337,489 (3 percent)
- Other: \$1,216,660 (10 percent)²

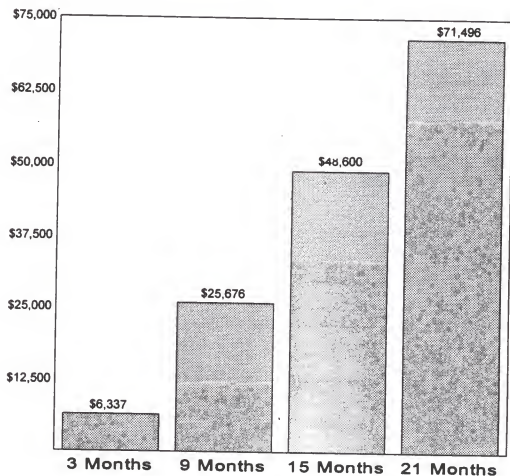
Capital items purchased by the 1991 grantees include furniture for outpatient clinics, construction materials, and durable medical equipment. The 1991 grantees used grant funds to pay for such nonphysician contracts as physician recruiter fees, wages for strategic planning consultants, and fees for invited speakers for hospital board retreats.

During the first 3 months, the cumulative average spending per 1991 grantee was \$6,337. Nine months into their projects, grantees had spent a cumulative average of \$25,676; 15 months into their projects, they had spent a cumulative average of \$48,600; 21 months into their projects, they had spent a cumulative average of \$71,496.³ (See Figure III.1.) The monthly average expenditure for this reporting period was almost the same as the monthly average expenditure of the previous 6 months, suggesting that grantees made similar and steady progress on their project activities.

²Percentages do not total 100 percent because of rounding error.

³The cumulative average spending per grantee was calculated by summing the average total amount spent per grantee across reporting periods.

FIGURE III.1
AVERAGE GRANT EXPENDITURES AFTER 21 MONTHS,
1991 GRANTEES



NOTE: Cumulative average expenditures, all grantees.

IV. SELF-REPORTED PROGRESS OF 1992 GRANTEES

The second progress report from 1992 grantees (covering January 1, 1993 through June 30, 1993) was due on August 5, 1993. One hundred and fifty-four grantees returned their monitoring reports in time to be processed for this report. This chapter is based on the progress these grantees reported.

A. STATUS OF 1992 GRANTEES

Over the past 6 months, seven grantees left the program--two were reclassified as urban under Medicare and five voluntarily left the program. One hundred and fifty-four (94 percent) of the original 163 grantee hospitals are still active. (See Table IV.1.)

B. PROGRESS OF 1992 GRANTEES

The 1992 grantees made considerable progress during their first 9 months. Fifty-nine percent were on or ahead of schedule, 1 percent completed all their planned project activities, and 40 percent were behind schedule by more than 1 month--slightly ahead of the earlier grantees after 1 year (Giggle et al. 1993). Respondents identified the availability of financial resources, cooperation with other providers, and the dedication of volunteers as the greatest contributors to successful projects (these were also important factors for the earlier grantees). When the 1992 grantees fell behind schedule, the most common reason was that reported by earlier cohorts of grantees: the inability to recruit health care professionals.

TABLE IV.1
1992 GRANTEE STATUS

	At Award 9/15/92	Month 3 1/1/93	Month 9 7/1/93	Cumulative 7/1/93
Grantees Receiving an Award	163	--	--	163
Number of Discontinuations in Period	0	0	7 ^b	7
Number of Hospitals Ceasing Operations and Discontinued in Period	0	2 ^a	0	2
Number Remaining at End of Period	163	162	154	154
Other Changes:				
Ceased operations but still a grantee	0	0	0	0
Changed scope	0	0	0	0

^aAlfalfa County Hospital, Oklahoma
Estelline Community Hospital, South Dakota

^bFranklin County Medical Center, Idaho
Dimmit County Hospital, Texas
Melissa Memorial Hospital, Colorado
Sedgwick County Memorial Hospital, Colorado
St. John's Lutheran Hospital, Montana
Wedowee Hospital, Alabama
Fostoria Community Hospital, Ohio

After 9 months, the 1992 grantees' most frequent grant project activities were equipment purchases (111 grantees), recruitment (104 grantees), and training and staff development (91 grantees). Other frequent activities included planning or market analysis (76 grantees) and education, prevention, or wellness programs (59 grantees). (See Table IV.2.)

The 1992 grantees were most successful at completing equipment purchases and renovations--similar to the 1991 grantees after 9 months (Giggie et al. 1993). Thirty-nine percent of the 111 hospitals that planned equipment purchases had done so after 9 months, and 27 percent of the 33 hospitals that planned construction or renovation had completed the activity after 9 months.

Consistent with earlier reports submitted by preceding cohorts of grantees, hospitals that have introduced new services have adhered largely to schedule. For example, 88 percent of the outpatient service projects and 83 percent of the education, prevention, or wellness projects were either ahead of or on schedule.

Grantees that implemented inpatient or hospice services were the most likely to be delayed. Forty-three percent of the 1992 grantees implementing inpatient or hospice projects were behind schedule after 9 months. Similarly, most of the 1991 grantees implementing inpatient or hospice services were either behind schedule or incomplete after 9 months (see Giggie et al. 1993). However, 1 year later, these 1991 grantees overcame initial delays.

TABLE IV.2
PROJECT PROGRESS AFTER 9 MONTHS,
BY OBJECTIVE: 1992 GRANTEES

Project Objective	Total Number	Percentage Completed	Percentage Ahead of Schedule	Percentage on Schedule	Percentage Behind Schedule by More than One Month
Equipment Purchase	111	39	1	49	12
Recruiting	104	24	1	52	23
Training or Staff Development	91	8	1	79	12
Planning or Market Analysis	76	12	3	78	8
Education, Prevention, or Wellness Programs	59	3	5	78	14
Rural Health Network ^a	48	4	2	65	29
Outpatient Service	45	2	4	84	9
Construction or Renovation	33	27	3	46	24
Other	33	9	0	70	21
Clinic	31	10	0	65	26
Inpatient or Hospice Service	14	7	0	50	43
Other Health Service	12	0	0	75	25
Emergency Medical Services	7	0	0	71	29
Swing Beds	3	0	0	67	33
Total	154	1	0	59	40

SOURCE: Second Monitoring Report, 1992 grantees.

NOTES: Percentages may not total 100 percent because of rounding error. Only grantees that were still active at the end of 9 months are included.

Progress is defined by the project's most delayed activity. For example, a project that is on schedule in only one activity and ahead of schedule in all the rest is defined to be on schedule.

^aThese rural health networks include hospital consortia, as well as formal and informal networks.

C. GRANT EXPENDITURES

HCFA awarded \$6,855,659 to the 1992 grantees in the first year. Nine months after HCFA made the awards, the reporting hospitals had spent \$3,897,481 (57 percent of their first year grant awards).¹

The grantees reported spending more of their grants on personnel and fringe benefits (40 percent) than on any other category, a pattern of expenses similar to prior grantees. Cumulative expenditures by category included:

- Salary and fringe benefits: \$1,573,526 (40 percent)
- Equipment and capital: \$762,183 (20 percent)
- Nonphysician contracts: \$682,854 (18 percent)
- Physician contracts: \$196,834 (5 percent)
- Supplies: \$147,740 (4 percent)
- Travel: \$140,123 (4 percent)
- Other: \$394,221 (10 percent)²

The 1992 grantees purchased capital items including camcorders (for management training), computer equipment, facsimile machines, and emergency room equipment. They used grant funds to pay for such nonphysician contracts as physician recruiter fees, wages for financial consultants, and contracts with individual licensed practical nurses.

¹This figure and all following grant expenditure figures in this chapter include information from all 1992 grantees reporting since the beginning of the program.

²Percentages do not total 100 percent because of rounding error.

During the first 3 months, the cumulative average spending per 1992 grantee was \$4,178. Nine months into their projects, grantees spent a cumulative average of \$25,091.³ Following the pattern found among earlier grantees, the monthly average expenditure nearly doubled in the second reporting period (compared to the first reporting period), suggesting that the 1992 grantees overcame delays in getting their projects off the ground.

³The cumulative average spending per grantee was calculated by summing the average total amount spent per grantee across reporting periods.

V. HOW DO AGING FACILITIES AFFECT THE HOSPITALS' OPERATIONS AND THEIR GRANT PROJECTS?

Some of the 1991 and 1992 rural health care transition (RHCT) grant winners have not renovated their facilities in as many as 40 years. The administrators of these old facilities are likely to have difficulty recruiting physicians, attracting patients, and implementing grant projects. To explore the reasons for and effects of aging facilities on hospital operations and project progress, we interviewed the 40 grantees (20 grantees from 1991 and 20 grantees from 1992) with the oldest facilities--those most recently renovated between 1951 and 1973.¹

The 40 interviewed grantees were, in general, small public hospitals located primarily in the Midwest. Sixty-three percent of the interviewed grantees had 30 or fewer acute-care beds, 70 percent were owned by public entities, and 55 percent were located in the Midwest. These facilities had not been renovated, on average,² since 1966 and faced startling physical constraints. A few were wooden structures that did not meet fire safety codes, some lacked handicapped-accessible entrances (one hospital lacked a ground floor entrance), and several simply lacked space, operating administrative functions out of former closets. Many facilities could not handle the surging demand for both outpatient and long-term care services because they were poorly designed for current health care needs.

¹We used the hospitals' baseline reports to determine when the hospitals had most recently renovated their facilities before winning their RHCT grants. We defined renovation as a physical expansion or rebuilding of the facility--not as a basic maintenance upgrade.

²The interviewed hospitals, on average, were built in 1959. The oldest facility was built in 1934.

The high proportion of small hospitals (30 or fewer beds) among the oldest facilities suggests one reason why earlier studies found no grant program effects on small hospitals (Cheh and Wooldridge 1990; Wooldridge et. al 1991). The physical constraints faced by these hospitals may make it difficult for them to improve their financial capacity without making substantial capital improvements. Since the RHCT grants are only \$50,000 per year for 3 years, the grants may be too small to noticeably affect hospitals facing such constraints.

A. WHY SOME GRANTEES HAVE NOT RENOVATED RECENTLY

The interviewed grantees cited two reasons why they had not renovated their facilities: (1) they could not afford to renovate or had difficulty accessing capital financing (73 percent); and (2) they felt renovation was unnecessary (27 percent).

The largest proportion of the interviewed grantees felt that they could not afford to renovate their facilities. Some grantees could not justify renovation because of their poor financial status; hospital utilization was too low and financial losses were too great. Other grantees felt the costs of financing a renovation were prohibitive. A renovation is a multimillion dollar expense, and although these institutions were generally profitable, they felt they could not afford to spend the money.

Other grantees indicated they could not renovate because they lacked access to capital financing. Many of these hospitals are publicly owned and have to compete with other public entities, like school districts and county government projects, for limited tax dollars. For example, some government hospitals that need public funds to make major improvements cannot hold referendums to increase local sales taxes or approve bond issues because other

public entities have already depleted those funding sources. One small hospital in Nevada that has not renovated its facility since 1964 indicated that all local tax-supported bond issues are obligated for school and county projects. These tax-supported bonds, which are the maximum the county can afford, will retire in 15 years. Thus, the hospital will be unable to access public capital funds for another 15 years.

Finally, about one-quarter of the grantees interviewed had not renovated because the administrators thought renovation was unnecessary. These grantees felt their facilities were structurally sound, met their needs adequately, and did not need renovation or expansion--especially because their inpatient utilization was low and declining. One grantee noted that its hospital building "could be fancier looking, but that is not necessary for good patient care." Interestingly, none of these hospitals felt their out-of-date facilities negatively affected community support, physician recruitment, or utilization, even though many of them are financially distressed--either losing money or barely breaking even.

Two-thirds of the interviewed grantees indicated their facilities needed some type of renovation. Among these grantees, six are planning to renovate and nine are currently renovating or have recently completed renovations. The renovations include adding wings for outpatient services, re-organizing and consolidating services, adding wings for long-term care beds, modernizing the building (this includes new roofs, new electrical wiring, new heating/cooling systems, and cosmetic enhancements like new carpeting and furniture), and connecting the hospital to the local physician clinic (usually located next door).

In contrast to the majority of the interviewed hospitals, 15 hospitals were making significant progress toward renovating their facilities. Nine grantees had renovated since receiving their award and six grantees have plans to renovate. To finance these renovations, the grantees are exploring tax referendums (for example, increasing the local sales tax to pay for debt service), bond passages (general obligation bonds from a county or hospital district), fund-raising, grants, and hospital reserves. The average cost for these renovations is estimated by the interviewed grantees to be \$3.7 million.³

B. DOES AN OLD FACILITY AFFECT HOSPITAL OPERATIONS?

Approximately two-thirds (68 percent) of the interviewed grantees felt that their aging facilities negatively affected their hospitals' operations. In particular, the grantees felt that their facilities, which were built when medicine was inpatient focused, limited their abilities to meet the increasing demand for outpatient services and to "keep up with the times." These grantees indicated that their inpatient and outpatient services were scattered throughout their hospitals, resulting in inefficient staffing patterns and poor patient traffic between departments. These grantees felt that they could utilize their staff more efficiently and serve their patients more effectively by consolidating similar services into one area. For example, one grantee wanted to move all of its outpatient services to one area of the hospital that could be connected to the local physician clinic.

³One grantee was not included in the average because it was a relatively large facility, with 95 beds, rebuilding its entire facility at an estimated cost of \$12 million. This high cost was not typical of the costs reported by the other interviewed grantees.

Several grantees felt that their aging facilities hurt them financially by damaging community support (people preferred more modern facilities), hurting physician recruitment efforts (physicians disliked practicing in out-of-date facilities), and injuring their reputations for quality care (resulting in lower utilization).

Further, most of the grantees that were planning renovations felt the renovation would improve hospital operations through increased outpatient utilization, an improved flow of traffic between departments, an enhanced reputation in the community, and enhanced physician recruitment efforts.

C. DOES AN AGING FACILITY AFFECT THE GRANT PROJECT CHOICE AND PROGRESS?

We anticipated that older facilities would affect both the types of projects undertaken and how smoothly the projects progressed. In particular, we expected that older facilities might be more likely to use their grants to undertake renovation projects (despite the limits on capital). Alternatively, we thought older buildings might impede project progress in a number of ways (for example, slowing equipment installation or making health professional recruitment difficult). However, we found little evidence that older facilities affected the grant projects.

The age of the facility did not appear to affect project choice--these 40 grantees were pursuing a variety of projects just like the rest of the grantees. Only 5 of the 40 interviewed grantees used their RHCT grants to support renovation projects. For example, one hospital used its grant to develop, construct, and implement a 14-unit assisted living facility attached to the hospital. The hospital recently completed construction of the facility and planned

occupancy by the end of the year. Another grantee used its grant to plan renovation of its outpatient service area to accommodate handicapped patients and increased demand for ambulatory services.

Surprisingly, most of the interviewed grantees (83 percent) indicated that the age of their facilities had no impact on the progress of their RHCT grant projects. Further, the majority of the interviewed grantees (65 percent) were on schedule with their grant projects, a higher proportion than the grantees overall.⁴ The few grantees (17 percent) that said their facility's age negatively affected their grant projects cited space constraints, inability to meet safety codes, and negative effects on physician recruitment.

⁴This information was reported in the fourth 1991 and second 1992 grantee project progress forms.

VI. SUMMARY OF PROGRAM PROGRESS

Twenty-one months into their projects, the majority of 1991 grantees (61 percent) were on schedule. Because of this long operational period, grantees had enough time to make progress, even with projects that originally fell behind schedule. For example, 1991 grantees were most successful at establishing inpatient services or swing beds, activities that were generally behind schedule or incomplete during earlier reporting periods. The 1991 grantees were most likely to fall behind schedule implementing recruitment and clinic projects: 28 percent of the recruiting projects and 21 percent of the clinic projects were behind schedule after 21 months. The clinic projects generally fell behind schedule because of difficulties recruiting staff.

After 9 months, the majority of 1992 grantees (59 percent) were also on schedule with their project activities. Like earlier grantees, the hospitals that introduced new services adhered largely to schedule. For example, more than three-quarters of the outpatient service projects and education, prevention, and wellness projects were either ahead of or on schedule. The 1992 grantees were most likely to fall behind schedule implementing inpatient or hospice projects: 43 percent of the inpatient or hospice projects were behind schedule after 9 months. However, the 1991 grantees, which also faced initial delays implementing inpatient or hospice projects, were more successful completing this activity after 21 months.

The 1991 and 1992 consortium grantees have made considerable progress: 41 percent have actually implemented their consortium projects. These grantees were most successful at

implementing projects like joint staff training and joint strategic planning. Some consortia were successful at implementing joint projects because they had formed before winning their RHCT grants and had more time to establish their consortium relationships. A smaller proportion of the consortium grantees (32 percent) have formed their consortia but have yet to start any grant-sponsored programs, while 27 percent have experienced problems implementing their projects and have dropped their consortium efforts and are instead pursuing independent projects.

More than two-thirds of the 40 interviewed grantees with facilities that have not been renovated for an average of 27 years indicated that the age of their facilities had no effect on their RHCT grant project progress. Moreover, more of the interviewed grantees (65 percent) were on schedule with their grant projects than the other grantees. Only a few of the interviewed grantees (17 percent) reported that their facility's age negatively impacted their grant project progress--they cited space constraints, inability to meet safety codes, and negative effects on physician recruitment as causing project delays.

REFERENCES

- Christianson, John, Ira Moscovice, Judy Johnson, John Kralewski, and Colleen Grogan. "Evaluating Rural Hospital Consortia." *Health Affairs*, vol. 9, no. 1, Spring 1990, pp. 135-147.
- Giggie, Marisa, Charles Nagatoshi, and Judith Wooldridge. "Evaluation of the Grant Program for Rural Health Care Transition: Seventh Semi-Annual Progress Report." Princeton, NJ: Mathematica Policy Research, Inc., January 1993.
- Kralewski, John, Ira Moscovice, Judy Johnson, John Christianson, and Benjamin Chan. "Organizational and Administrative Factors Influencing the Adoption of Consortia Programs by Rural Hospitals." *Hospital and Health Services Administration*, vol. 38, no. 3, Fall 1993.
- Morrissey, M., J. Alexander, and R. Ohsfeldt. "Physician Integration Strategies and Hospital Output: A Comparison of Rural and Urban Institutions." *Medical Care*, vol. 28, no. 7, July 1990, pp. 586-599.
- Office of Technology Assessment. *Health Care in Rural America*. OTA-H-434. Washington, DC: U.S. Government Printing Office, September 1990.



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